

REMARKS

In the December 8, 2005 Office Action, claims 1-8, 11, 12, and 19-22 stand rejected in view of prior art, while claims 9, 10, and 13-18 were indicated as containing allowable subject matter. Claims 1-7 also were rejected for failing to indicate and claim particularly and distinctly the subject matter that Applicants regard as the invention. No other objections or rejections were made in the Office Action.

Status of Claims and Amendments

In response to the December 8, 2005 Office Action, Applicants have amended claims 1, 5, 6, 8, 9, 13, and 21 as indicated above. Further, Applicants have amended the specification and claims 2, 3, 7, 10-12, and 14-20 to correct typographical and/or form errors. Moreover, Applicants have added claims 23-27. Applicants wish to thank the Examiner for this indication of allowable subject matter and the thorough examination of this application. Thus, claims 1-25 are pending, with claims 1, 8, 9, 13, 21, 26, and 27 being the only independent claims. Reexamination and reconsideration of the pending claims are respectfully requested in view of above amendments and the following comments.

Claim Rejections - 35 U.S.C. §112

On page 2 of the Office Action, claims 1-7 were rejected under 35 U.S.C. §112, second paragraph. In response, Applicants have amended claims 1, 5, and 6 to clarify claims 1-7.

Specifically, the language has been changed in the method claims to indicate that clear steps are taken.

Applicants believe that the claims now comply with 35 U.S.C. §112, second paragraph. Withdrawal of the rejections is respectfully requested.

Rejections - 35 U.S.C. § 102

On pages 2-3 of the Office Action, claims 1-4, 7, 8, and 20-22 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,061,882 (Takagi). On page 3 of the Office Action, claims 1-8, 11, 12, and 20-22 stand rejected under 35 U.S.C. §102(b) [sic] as being anticipated by U.S. Patent No. 6,661,154 (Shibatani). Applicants believe that rejections under Shibatani should be under 35 U.S.C. §102(e). Regardless, Applicants have amended independent claims 1, 8, and 21 to define clearly the present invention over the prior art of record. Further, Applicants have amended claims 11 and 20 to depend on claim 9.

In particular, independent claims 1, 8, and 21 have been amended to recite that the contact sections of the piezoelectric actuator are convexities provided on opposite sides of the oscillator. As seen in Figure 2 of Takagi, Takagi discloses a smooth contact section. Further, as seen in Figure 1 of Shibatani, Shibatani discloses a contact section 5 on only one side of the oscillator.

Clearly, this structure is ***not*** disclosed or suggested by Takagi, Shibatani or any other prior art of record. It is well settled under U.S. patent law that for a reference to anticipate a claim, the reference must disclose each and every element of the claim within the reference. Therefore, Applicants respectfully submit that claims 1, 8, and 21, as now amended, are not anticipated by the prior art of record. Withdrawal of this rejection is respectfully requested.

Moreover, Applicants believe that dependent claims 2-7, 11, 12, 20, and 22 are also allowable over the prior art of record in that they depend from independent claims 1, 8, and 21, and therefore are allowable for the reasons stated above. Also, the dependent claims are further allowable because they include additional limitations. Thus, Applicants believe that since the prior art of record does not anticipate the independent claims, neither does the prior art anticipate the dependent claims.

Applicants respectfully request withdrawal of the rejections.

Rejections - 35 U.S.C. § 103

On pages 3 and 4 of the Office Action, claim 19 stands rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,061,882 (Takagi) or U.S. Patent No. 6,661,154 (Shibatani). In response, Applicants have amended independent claims 1, 8, and 21 as mentioned above.

More specifically, independent claim 8 has been amended to recite that the contact sections of the piezoelectric actuator are convexities provided on opposite sides of the oscillator. As seen in Figure 2 of Takagi, Takagi discloses a smooth contact section. Further, as seen in Figure 1 of Shibatani, Shibatani discloses a contact section 5 on only one side of the oscillator.

Clearly this arrangement is ***not*** disclosed or suggested by the Takagi or Shibatani patent, or any other prior art of record. It is well settled in U.S. patent law that the mere fact that the prior art can be modified does ***not*** make the modification obvious, unless the prior art ***suggests*** the desirability of the modification. Accordingly, the prior art of record lacks any suggestion or expectation of success for combining the patents to create the Applicants' unique arrangement of a piezoelectric actuator.

Moreover, Applicants believe that dependent claim 19 is also allowable over the prior art of record in that it depends from independent claim 8, and therefore is allowable for the reasons stated above. Also, the dependent claim is further allowable because it includes additional limitations. Thus, Applicants believe that since the prior art of record does not disclose or suggest the invention as set forth in independent claim 8, the prior art of record also fails to disclose or suggest the invention as set forth in the dependent claim.

Therefore, Applicants respectfully request that this rejection be withdrawn in view of the above comments and amendments.

Allowable Subject Matter

On page 4 of the Office Action, claims 9, 10, and 13-18 were indicated as containing allowable subject matter. Applicants wish to thank the Examiner for this indication of allowable subject matter and the thorough examination of this application. In response, Applicants have amended claims 9 and 13 to place them in independent form. ***Please note that claim 13 was placed in independent form without the limitations of the intervening claims. Further, in claim 13, the limitation reciting that frequency of the drive signal being based on the detection signal and the drive signal was not included. Moreover, language that was deemed to be superfluous was not included in claims 9 and 13 were respectively not included and deleted.*** Thus, independent claims 9 and 13 are believed to be allowable.

New Claims - 23-27

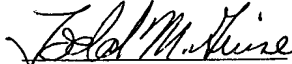
Applicants have added new claims 23-25. Claim 23 is similar to claim 11 except that it depends on claim 13. Further, claims 24 and 25 are respectively similar to claims 19 and 20 except that they depend on claim 13. Claims 26 and 27 are method claims that are similar to claims 9 and 13. Examination and consideration are respectfully requested.

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In view of the foregoing amendment and comments, Applicants respectfully assert that claims 1-27 are now in condition for allowance. Reexamination and reconsideration of the pending claims are respectfully requested.

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Respectfully submitted,


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